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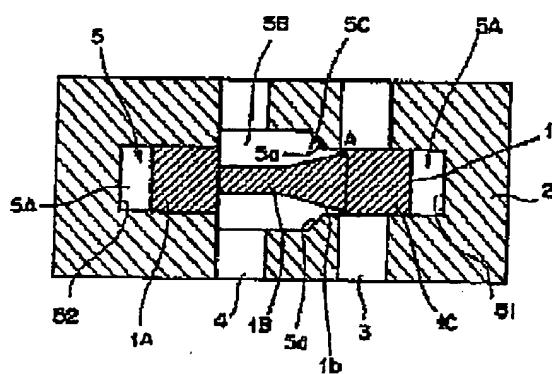
APPLICATION DATE : 02-12-96
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APPLICANT : MITSUBISHI HEAVY IND LTD;

INVENTOR : SAITO HIROSHI

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**TITLE : SPOOL TYPE HYDRAULIC CONTROL
VALVE**



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ABSTRACT : PROBLEM TO BE SOLVED: To reduce vibration of a spool, improve spool controllability and reduce noise by contriving to reduce axial force acting upon the spool.

SOLUTION: This control valve is composed to be provided with a sleeve 2, which includes a high pressure port 3 and a low pressure port 4 and is formed in its interior a valve chamber 5 communicating with the high pressure port 3 and the low pressure port 4, and a spool 1, which controls the oil pressure by regulating the opening of the high pressure port 3 or the low pressure port 4 by sliding inside the valve chamber 5 of the sleeve 2. In this case, a tapered area 1b, whose cross section contracts from the high pressure port 3 side toward the low pressure port 4 side, is formed on the spool 1.

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